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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/715,865

11/18/2003

George Pappas

UP-295

5607

7590

02/16/2006

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EXAMINER

GOODEN JR, BARRY J

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/715,865

Applicant(s)

PAPPAS, GEORGE

Examiner

Barry J. Gooden Jr.

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/18/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/22/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the compression springs being fully compressed must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The current drawings do not clearly show a difference between the compressed and relax states of the compression springs.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The specification does not disclose the compression spring ever being fully compressed; however, claim 20 is drawn to the compression spring being fully compressed.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9, 10, 16, 17, 26, 27, and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 9, 10, 16, 17, 26, 27, and 31, disclose the compression spring exerting a direct bias on the locking pin; however, the compression spring only exerts a direct bias on the locking pin when the compression spring is compressed. The claims should be modified to reflect this, for example claim 9 could be modified as follows: -- The slider assembly of claim 1 wherein the second spring exerts a direct bias on the locking pin, when the pivot arm is in the unlocked position --.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 28 is rejected under 35 U.S.C. 102(b) as being anticipated by Hutchens, US Patent 3,372,946.

In regards to claim 28, Hutchens shows a slider assembly (50) providing an operative connection between a vehicle body and a vehicle suspension (spring hangers are shown in Figure 1), the slider assembly (50) comprising:

a frame assembly (10) operatively connecting the vehicle body (60) and the vehicle suspension, the frame assembly (10) including a locking mechanism (80), the locking mechanism (80) comprising:

a locking pin (93) connected to a first means for exerting a first bias on the locking pin (93) so as to bias the locking pin (93) into a locked position (Figure 2);

a pivot arm (86) movable between a locked position (Figure 2) and an unlocked position;

a second means (91), connecting the pivot arm (86) and the locking pin (93), for selectively exerting a second bias on the locking pin (93) wherein the second bias acts to overcome the first bias (94) and moves the locking pin (93) to an unlocked position;

when the pivot arm (86) is in the locked position (Figure 2) the second means (91) does not exert a bias on the locking pin (93) so that the first means (94) biases the locking pin (93) into engagement with the vehicle body (60) so as to secure together the vehicle body (60) and the vehicle suspension; and,

when the pivot arm (86) is in the unlocked position the second means (91) exerts the second bias on the locking pin (93) so as to overcome the first bias (94) of the first means (94) so as to move the locking pin (93) out of engagement with the vehicle body (60) so that the vehicle body (60) is slidable with respect to the vehicle suspension.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5, 7-27, and 29-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchens in view of Drager, US Patent 6,260,833 B1.

7. In regards to claims 1-5 and 7-10, Hutchens shows all of the claimed elements including a slider assembly (50) providing a connection between a vehicle body (60) and a vehicle suspension (hangers for a suspension are shown in Figure 1), the slider assembly (50) comprising:

a frame (10; column 2, lines 50-70);

a locking mechanism (80) attached to the frame (10), the locking mechanism (80) comprising:

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a locking pin (93) movable in and out of engagement with the vehicle body (60);

a first spring (94) adjacent the locking pin (93);

a pivot arm (86) movable between a locked position (See Figure 2) and an unlocked position;

a second means (91) between the pivot arm (86) and the locking pin (93);

when the pivot arm (86) is in the locked position (See Figure 2), the second means (91) does not exert a bias on the locking pin (93) and the first spring (94) exerts a bias on the locking pin (93) so as to bias the locking pin (93) into engagement with the vehicle body (60) so as to secure together the vehicle body (60) and the vehicle suspension; and,

when the pivot arm (86) is in the unlocked position, the second means (91) exerts a bias on the locking pin (93) that overcomes the bias of the first spring (94) thereby biasing the locking pin (93) out of engagement with the vehicle body (60) so that the vehicle body (60) is slidable with respect to the vehicle suspension;

wherein the first spring (94) is an extension spring, and the bias of the second means (91), when the pivot arm (86) is in the unlocked position, is greater than the bias of the extension spring (94) on the locking pin (93);

wherein the second means (91) is movable between a relaxed position when the pivot arm (86) is in the locked position (See Figure 2) and a biasing position when the pivot arm (86) is in the unlocked position;

wherein the second means (91) exerts a direct bias on the locking pin (93), when the pivot arm (86) is in the unlocked position;

wherein the first spring (94) and the second means (91) each exert a direct bias on the locking pin (93), when the pivot arm (86) is in the unlocked position;

further including a crank arm (85) being operatively connected to the pivot arm (86), and the crank arm (85) being movable between a locked position (See Figure 2) in which the pivot arm (86) is in the locked position (See Figure 2) and an unlocked position in which the pivot arm (86) is in the unlocked position;

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further including a central shaft (87) connected to the pivot arm (86), and the crank arm (85) being connected to the central shaft (85) whereby the shaft (87) and the pivot arm (86) rotate upon movement of the crank arm (85) (See Figure 2);

further including a pull rod (82) connected to the crank arm (85), the pull rod (82) being longitudinally movable between a locked position (See Figure 2) and an unlocked position; and, wherein the first spring (94) exerts a direct bias on the locking pin (93).

8. Hutchens discloses all of the claimed elements except for the second means (91) being compression springs.

Drager teaches a compression spring (See Figure 1) as being connectable between two elements and capable of transmitting a force while reducing shock to a system.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the slider assembly of Hutchens in view of the teachings of Drager to include a compression spring, either replacing or in series with element 91 of Hutchens, so as to provide a means of transmitting force while reducing shocks to the locking pins thereby preventing undesired unlocking.

9. In regards to claims 11-27 and 29-31, Hutchens discloses all of the claimed elements, as shown above in Office Action Item 7, including a second (86') pivot arm, respective locking pins (93,93'), second means (91,91'), and first springs (94), and a connecting shaft (87) between the first (86) and second (86') pivot arms.

10. Hutchens discloses all of the claimed elements except for the second means (91,91') being compression springs.

Drager teaches a compression spring (See Figure 1) as being connectable between two elements and capable of transmitting a force while reducing shock to a system.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the slider assembly of Hutchens in view of the teachings of Drager to include a

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compression spring, either replacing or in series with element 91 of Hutchens, so as to provide a means of transmitting force while reducing shocks to the locking pins thereby preventing undesired unlocking.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchens in view of Drager as applied to claim 1, seen above, and further in view of Baxter, US Patent 4,838,578.

Hutchens in view of Drager teaches all of the claimed elements, see Office Action Items 7 and 8, except for the pull rod including a pair of notches.

Baxter teaches a pull rod including a pair of notches that selectively engage the frame so as to prevent the longitudinal movement of the pull rod, one of the notches corresponding to the locked position and the other of the notches corresponding to the unlocked position.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the pull rod of Hutchens in view of the teachings of Baxter to include a pair of notches so as to provide a means of securing the pull rod against longitudinal shocks thereby preventing undesired unlocking or locking.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry J. Gooden Jr. whose telephone number is (571) 272-5135. The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Barry J Gooden Jr.
Examiner
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BJG

A handwritten signature in black ink, appearing to read "Eric Culbreth". The signature is fluid and cursive, with the first name "Eric" and last name "Culbreth" clearly distinguishable.

ERIC CULBRETH
PRIMARY EXAMINER